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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,661	07/31/2003	Stephane Page	004501-734	7931

21839 7590 11/18/2004

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EXAMINER

KEEHAN, CHRISTOPHER M

ART UNIT PAPER NUMBER

1712

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/630,661

Applicant(s)

PAGE ET AL.

Examiner

Christopher M. Keehan

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5, 9 and 11 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/31/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to an insulator, classified in class 428, subclass 413.
- II. Claims 12 and 13, drawn to a molding method, classified in class 264, subclass 331.12.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group II and I are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another and materially different process, such as by lamination.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Robert Swecker on November 17, 2004, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12 and 13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant's election of Group I in the conversation filed on of November 16, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Quaggia. Regarding claims 1-3, Quaggia discloses a solid insulator with an insulator body which is supporting at least one conductor that is able to carry high voltage, and that is arranged in an outer enclosure (Figure 2), wherein the insulator body comprises

a fiber-reinforced polymer, more specifically a fiber-reinforced epoxy material (col.7, lines 61-65).

Regarding claim 4, Quaggia discloses wherein the insulator body comprises conductive fibers (col.8, lines 24-38).

Regarding claim 5, Quaggia does not appear to specifically disclose the orientation of the fibers in the insulator body such that quasi-isotropic mechanical properties of the insulator body is achieved. On page 6, lines 1 and 2 of the specification, applicant has defined quasi-isotropic properties as "in-plane properties identical in all directions." Quaggia discloses a coherent insulator body that is composed of the same material as that of applicant (as set forth above). It is not clear why the insulator body of Quaggia would not also exhibit quasi-isotropic properties. Therefore, it appears the quasi-isotropic property as claimed by applicant is inherently disclosed by the insulator body of Quaggia because the insulator body of Quaggia is composed of the same material as that claimed by applicant, and the same material would have yielded an insulator body with the same inherent properties, absent evidence to the contrary.

Regarding claim 11, Quaggia discloses wherein the fiber backbone in the insulator body comprises a preform, which comprises a three-dimensional woven fiber structure (col.13, lines 12-20). It is the examiner's position that the fiber layer of Quaggia is a preform, as they are not formed in situ.

***Claim Rejections - 35 USC § 103***

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quaggia (6,333,462 B1). Quaggia, as applied above, are as set forth and incorporated herein. Quaggia discloses making a winding with the insulating fibers (col.13, lines 16-20), which would constitute unidirectional fibers as claimed. Quaggia does not appear to teach or disclose stacked layers of the epoxy fiber layer. However, it has been held that the mere duplication of parts is unpatentable. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the stacked layers to be connected physically or chemically, as unconnected layers would create an insulator body that is not coherent.

***Allowable Subject Matter***

Claims 6-8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Quaggia does not teach or disclose any specific orientation of the fibers in the insulator body. The prior art of record did not appear to teach or disclose a solid insulator wherein the orientation of the fibers in the insulator body are arranged as claimed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is

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(571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

November 17, 2004

Christopher Keehan  
Art Unit 1712  
*cc*